

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF HAWAII

MĀLAMA MĀKUA, a Hawai`i non-profit corporation,)	CIVIL NO. 09-00369 SOM/LEK
)	
Plaintiff,)	FINDINGS OF FACT; CONCLUSIONS
)	OF LAW; ORDER DETERMINING
vs.)	THAT THE ARMY BREACHED THE
ROBERT GATES, Secretary of Defense; and JOHN McHUGH, Secretary of the United States Department of the Army,)	2007 SETTLEMENT AGREEMENT IN TWO WAYS, BUT NOT IN OTHER WAYS
)	
Defendants.)	
)	

FINDINGS OF FACT; CONCLUSIONS OF LAW;
ORDER DETERMINING THAT THE ARMY BREACHED THE
2007 SETTLEMENT AGREEMENT IN TWO WAYS, BUT NOT IN OTHER WAYS

I. INTRODUCTION.

It has been almost eleven years since Plaintiff Mālama Mākua brought to this court its claim that Defendants ("the Army") had to prepare an environmental impact statement addressing the effects of military training with live ammunition at the Makua Military Reservation in West Oahu, Hawaii. The parties' present disputes bear little resemblance to the original claim. Now before the court is the narrow issue of whether the Army breached a 2007 agreement in which the Army pledged to conduct a marine resource survey. The court concludes that the Army breached that agreement by failing to test limu (seaweed) and other marine resources that are eaten by residents of the Waianae Coast to evaluate whether they posed a human health risk.

In all other respects, the court concludes that the Army did not breach the agreement.

III. FINDINGS OF FACT.

This court held a nonjury trial on June 21 to 23, 2011, receiving direct testimony through its usual nonjury trial procedure of having direct testimony submitted in declaration form and having witnesses available for live cross-examination and redirect. Based on the testimony and exhibits received into evidence, the court finds that the following facts have been established by a preponderance of the evidence.

To the extent any finding of fact should more properly be designated a conclusion of law, it should be treated as a conclusion of law. Similarly, to the extent any conclusion of law should more properly be designated a finding of fact, it should be treated as a finding of fact. For ease of reference to particular findings and conclusions in later proceedings, if any, the findings and conclusions are presented in sequential numbered paragraphs.

1. On June 21, 2011, Mālama Mākua put on its case-in-chief, with testimony by Gary Shirakata (declaration submitted in lieu of live direct examination at ECF No. 175), Vince Kanai Dodge (declaration submitted in lieu of live direct examination at ECF No. 176), Leandra Wai (declaration submitted in lieu of live direct examination at ECF No. 177), Uyen Tran (declaration

submitted in lieu of live direct examination at ECF No. 178), Susan Carstenn (declaration submitted in lieu of live direct examination at ECF No. 179), Jack Rensel (declaration submitted in lieu of live direct examination at ECF No. 180), and Jeffrey Foran (declaration submitted in lieu of live direct examination at ECF No. 181). Exhibits 1, 4, 5, 6, 7, 10, 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 28, 29, 30, 31, 32 were received into evidence that day. Deposition designations of William Aila, Jr., were also admitted into evidence. See ECF No. 171. A transcript of the June 21, 2011, proceedings was filed as ECF No. 194.

2. On June 22, 2011, the Army put on its case-in-chief, with testimony by Uyen Tran (declaration submitted in lieu of live direct examination at ECF No. 183), Susan Carstenn (declaration submitted in lieu of live direct examination at ECF No. 184), and Dawn Lleces (declaration submitted in lieu of live direct examination at ECF No. 185). Exhibits 8, 26, 33, 34, 100, 105, 106, 107A-G, 108, 109, 111, and 117 were received into evidence that day. A transcript of the June 22, 2011, proceedings was filed as ECF No. 195.

3. On June 23, 2011, Dawn Lleces continued testifying. When the Army rested, Mālama Mākua chose not to present a rebuttal case. The court then heard closing arguments.

A transcript of the June 23, 2011, proceedings was filed as ECF No. 196.

4. All of the witnesses testified credibly and, for the most part, consistently. Except as discussed below, the court gives credence to the testimony of the witnesses.

5. The sequence of events giving rise to the present dispute about testing marine resources dates back to October 4, 2001, when Mālama Mākua and the Army filed a settlement agreement with this court resolving the issue of whether the Army had to prepare an environmental impact statement that addressed the effects of military training with live ammunition at the Makua Military Reservation ("MMR") in West Oahu, Hawaii. See Settlement Agreement and Stipulated Order, Oct. 4, 2011, Ex. 1 ("2001 Settlement Agreement").

6. Among other things, the 2001 Settlement Agreement required the Army to "Complete studies of potential contamination of soil, surface water, and ground water, and of potential impacts on air quality, associated with the proposed training activities at MMR." 2001 Settlement Agreement ¶ 6(a). The studies were to evaluate whether there was the potential of contamination to "the muliwai [brackish water pools near mouths of streams], or any marine resource or wildlife on or near Mākua Beach." Id. If the studies revealed a likelihood of contamination, the Army was to "undertake additional studies of

the[] resources (e.g., testing of fish, limu and other marine resources on which area residents rely for subsistence; testing of the muliwai for contamination).” Id.

7. The Army hired Tetra Tech, Inc., to prepare the Marine Resource Study required by the 2001 Settlement Agreement and to draft a plan for gathering samples and analyzing them. Dawn Lleces testified that she worked for Tetra Tech as an environmental scientist. See Decl. of Dawn Lleces ¶ 1, ECF No. 186, June 22, 2011. According to Lleces, in 2005, she sought public input regarding what marine resources should be sampled for the survey. Id. ¶ 2. Lleces says that she talked with a number of people at public meetings, including members of Mālama Mākua. Id. ¶ 3. Lleces recalled that, at these meetings, members of Mālama Mākua told her that “they eat everything they find at the muliwai.” Id. But other members of the public told her that they never eat anything from the muliwai. Id. Lleces also testified that Mālama Mākua members told her that “they ate what they caught at Mākua.” Id. ¶ 4.

8. Based on conversations with people who identified themselves as being from the Waianae Coast, Lleces says that the Army and Tetra Tech decided to apply a “common sense and popular understanding of ‘subsistence,’” using the term to refer to any personal or family consumption of marine resources. Id. ¶ 5. Uyen Tran, a supervisory chemist for the Army Corp of Engineers,

similarly testified that, since December 2005, the Army has considered anyone who eats something to be relying on that item for subsistence, without regard to frequency or quantity. See Decl. of Uyen Tran ¶¶ 10 and 13, ECF No. 178; see also Army's Closing Arguments, Transcript at 3-37, ECF No. 196; Federal Defendants' Response to Plaintiffs' [Proposed] Post-Trial Findings of Fact and Conclusions of Law at 1, Aug. 15, 2011, ECF No. 200 ("The Parties agree that with respect to marine resources, the phrase 'on which area residents rely on for subsistence' as used in the 2007 Settlement Agreement means a marine resource that serves as a food source for area residence without regard to frequency or quantity.").

9. In December 2005, the Army issued a Marine Resources Study Sampling and Analysis Plan that had been prepared by Tetra Tech. Marine Resources Study Sampling and Analysis Plan at 2-2, Dec. 2005, Ex. 4. This plan described the Army's proposed marine resource survey, noting that, for testing purposes, species of interest included parrotfish, papiro, tilapia, octopus, spiny lobster, and Limu kala. Id. at 2-1. The plan indicated that "species of interest (SOI) were identified through discussions with regional commercial fisherspersons, local recreational fisherspersons, area divers and spear fisherspersons, and local residents from the Waianae coast." See id. at 2-2; see also Lleces Decl. ¶ 7, ECF No. 186 (indicating that the "species

of interest" were developed based on an initial site inspection and public comment at a meeting held regarding a draft environmental impact statement for the Army's live-fire training at MMR).

10. J.E. Jack Rensel, Ph.D., reviewed the December 2005 plan. Rensel stated that he prepared comments on the plan at the request of Mālama Mākua's counsel. Rensel identified species in the muliwai and nearshore waters of Mākua that he thought should be tested. Id. at 10-13.

11. Jeffery A. Foran, Ph.D., also reviewed the plan on behalf of Mālama Mākua, commenting that the plan was deficient. See Plaintiff's Ex. 7.

12. Based on public comments by self-identified residents of the Waianae area, other members of the public, technical experts (presumably Rensel and Foran), and interviews with people at Mākua Beach, the Army through Tetra Tech revised the Marine Resources Study and Sampling and Analysis Plan in 2006 and again in 2007. See Exs. 14 and 104; Lleces Decl. ¶¶ 7-9. The revised plan described the species of interest for testing, prioritizing the species by whether they 1) served as food sources for humans, 2) spent part of their life cycles in or near the muliwai, and 3) represented a variety of "trophic levels and feeding niches." See Government Ex. 104 at 2-3; Plaintiff's Ex. 14 at 2-3. These species were identified through discussions

with commercial and recreational fishermen, area divers and spear fishers, and local residents of the Waianae Coast. See Government Ex. 104 at 2-3; Plaintiff's Ex. 14 at 2-3; Lleces Trial Test. ¶ 9. The revised plan lists the following as target species for the study:

Muliwai: Hawaiian Flagtail; Flathead Mullet; Tilapia

Nearshore: Bigeye Jack or Trevally; Sixfinger threadfin; Limu `ele `ele

Alternates: Giant, Blue, Bluefin and Island Trevally; Sharpnose Mullet; Sleek Unicornfish; Nehu; Common Parrotfish; Convict Surgeonfish; Yellowstripe Goatfish; Manybar Goatfish; Bluespine Unicornfish; Flame Snapper; Green Jobgish; Limu Wawae`iole; Limu Manauea.

Id. at 2-4.

13. On January 13, 2006, Mālama Mākua moved to enforce the 2001 settlement agreement, asking the court in relevant part to require the Army to complete and make available for public review contamination studies for fish, limu, and other marine resources near Mākua Beach. This led to a 2007 settlement agreement in which the Army agreed to conduct "one or more studies to determine whether fish, limu, shellfish, and other marine resources near Mākua Beach and in the muliwai on which area residents rely for subsistence are contaminated by substances associated with the proposed training activities at

MMR." See Joint Stipulation Re: Partial Settlement of Plaintiff's Motion to Enforce the October 4, 2001 Settlement Agreement and Stipulated Order ¶ 6, Jan. 8, 2007, Plaintiff's Ex. 15 ("2007 Settlement Agreement"). At the heart of the present dispute are provisions in the 2007 Settlement Agreement requiring the Army "to test the marine resources for all substances" listed in an attached table and to "evaluate the potential that activities at MMR have contributed or will contribute to any such contamination and whether the proposed training activities at MMR pose a human health risk to area residents that rely on marine resources for subsistence." Id.

14. The 2007 Settlement Agreement further states that "Defendants have completed the field work they believe is necessary to complete the studies described in paragraph 6." Id. ¶ 7. The unusual reference to the Army's "belief" suggests that there was no agreement by Mālama Mākua on this point. Both sides also appear to have contemplated that additional fieldwork might be necessary. See id. (noting that, if Defendants conducted additional field work, written notice of that field work had to be provided to Mālama Mākua and that two representatives of Mālama Mākua would be allowed to observe the additional field work).

15. The Army and Tetra Tech collected field samples for the survey in August and September 2006. See Lleces Decl.

¶ 16. At that time, based on conversations with two area fishermen, the Army added stripped mullet to its species of interest list, as the Army was told that area residents caught and ate stripped mullet. Id.

16. Table 2-2 of the Marine Resources Survey identifies the fish collected and tested from the muliwai and Mākua Beach. It indicates that the following fish were tested from the muliwai: striped mullet, Hawaiian flagtail, tilapia, and medaka. Table 2-2 also indicates that the following fish were tested from the nearshore waters at Mākua Beach: Picasso triggerfish, Blackspot sergeant, manybar goatfish, and Christmas wrasse. The fish were collected through shoreline pole fishing, not through any other method such as diving or fishing from a boat. Transcript of Proceedings at 2-123, June 22, 2011, ECF No. 195 (Carstenn testifying).

17. Lleces indicated that she was told by Leandra Wai and two local fishermen that the fish that were caught were eaten by area residents. See Lleces Decl. ¶¶ 20-21. (This is consistent with Carstenn's testimony that the Army was told that people ate what they caught, see Carstenn Decl. ¶ 25, ECF No. 184, although the court's finding here does not turn on Carstenn's testimony on this point because the testimony was received for the purpose of establishing methodology, not for the truth of whether people actually did eat what they caught. See

Transcript of Proceedings at 2-97, June 22, 2011, ECF No. 195.)

Uyen Tran similarly testified that she was told by some people, including members of Mālama Mākua, that they ate whatever they caught at the muliwai, although others told her that they did not eat anything from the muliwai. See Decl. Uyen Tran ¶ 8, June 22, 2011, ECF No. 183. Tran testified that there were "many representations" that people "eat what they catch." Id. ¶ 21.¹

¹Mālama Mākua moved during trial to exclude all testimony concerning how the Army had determined whether area residents relied on the fish caught for subsistence. See ECF No. 193. That motion is denied. Mālama Mākua argued that the Army's Rule 30(b)(6) designee, Uyen Tran, testified that only Leandra Wai told Army representatives that she ate the fish caught. Mālama Mākua then argues that the Army should not be allowed to put forth evidence differing from that testimony. However, Mālama Mākua failed to establish that the Army is putting forth any such different evidence. Tran testified in her deposition in response to a question about how "species of interest" were determined that the Army was told by "people" that they ate whatever they found on the end of their fishing lines. See Deposition of Uyen Tran at 144-45, Dec. 9, 2010, ECF No. 193-5.

Tran was then asked whether "any analysis [was] done of whether these are species of fish that area residents who gather for subsistence at Makua prefer." In response to that question, Tran said, "We asked them if they would eat it and they said yes." Id. at 145. Tran clarified that statement by saying that Leandra Wai had been asked whether she would eat it, and Wai had said "yes." Id. Tran then testified that the questioning of Wai was the only information supporting her answer. Id. That testimony, by itself, is not sufficiently clear to support Mālama Mākua's contention that Tran identified only Wai as having told the Army that she ate what was caught, as Tran's testimony was in response to a question regarding whether any analysis was done to determine what fish area residents preferred to eat, not who had told the Army that they ate whatever they caught. In other words, Tran's deposition testimony was not sufficiently clear that it supports Mālama Mākua's contention that Wai was the only source of information that area residents consumed Picasso triggerfish, Blackspot sergeant, and Christmas wrasse.

18. Wai and Dodge testified that they knew of no area residents who ate Picasso triggerfish, Blackspot sergeant, or Christmas wrasse. Wai Decl. ¶ 21; Dodge Decl. ¶¶ 35-36. Wai said that she had never eaten those fish and had never heard of anyone eating Picasso triggerfish. Wai Decl. ¶ 22. Wai testified that she had seen only one person eat Christmas wrasse. Id. Dodge said his experience was that area residents were not opportunistic fishermen, instead targeting fish (and other marine resources) through the method of fishing (pole fishing versus spear fishing) and type of bait used (limu versus squid, shrimp, etc.). Dodge Decl. ¶ 42.

19. Lleces testified that Limu kala was deleted from the species of interest list because she was told by area fisherman that people usually used it for bait rather than food. Id. ¶ 18; see also Aila Depo. Designations at 42, ECF No. 171-1 ("My experience limu kala is very rarely eaten. If you've eaten it, you'd know why. It's a very -- it's a very rough, hard limu."). On this point, Leandra Wai differed, testifying that she gathered and ate Limu kala on a regular basis. See Decl. of Leandra Wai ¶¶ 5, 7, ECF No. 177. She said that she had seen many other local residents gathering Limu kala. Id. ¶ 12. Wai was present when marine resources were collected for testing for the required study and said that, although the Army and Tetra Tech spoke very little to her, she was shown some Limu kala that

had been collected for testing and scolded the person for having collected it by pulling it up by the roots. Wai told him to replant it and to gather it properly, by plucking only the new growth, not the whole plant. According to Wai, the Limu kala that had been collected was then replanted. Id. ¶ 15.

20. Lleces testified that Tetra Tech could not locate three types of limu identified by Mālama Mākua during the sampling period. See Lleces Decl. ¶ 18. Lleces says that Tetra Tech instead collected and tested three other types of limu-- *Acanthophora spicifera*, *Sargassum muticum*, and *Sargassum polyphyllum*. Id.; see also Tran Decl. ¶ 28; Transcript of Proceedings at 2-116, June 22, 2011, ECF No. 195 (Carstenn testifying that the limu that was collected was only the limu that could be collected from the shoreline without swimming or diving). Lleces says that these limu samples were shown to Leandra Wai of Mālama Mākua, who was asked whether she would eat the limu. Lleces says that Wai responded that she would eat the limu. See Lleces Decl. ¶ 18. Wai, however, testified that she had never gathered or consumed the tested limu, and that, because she was observing the collection of limu from a distance, she had no idea what types of limu were being collected for testing. See Wai Decl. ¶¶ 13, 16. Although the court found Lleces to have testified credibly, the court makes no determination as to whether Wai told Lleces that Wai would eat the limu. Given the

Army's repeated concession that the limu that was collected and tested was not "edible" because area residents did not eat it, the court need not determine what Wai told Lleces on the subject. See Marine Resources Study, Appendix F, response to comment 11 at 60, ("The species that were collected were the species that were available at Makua. None of the species tested were edible"); response to comment 245 at 111 ("Even though the species collected were not edible, we used this limu because they were the only form available"); response to comments 246 and 248 at 112 ("none of the species tested were edible"); response to comment 205 at 133 and comment 207 at 134 ("Even though the species collected were not edible, they were the only species available at Makua at the time of sampling"), Ex. 20; see also Dodge Decl. ¶ 25, ECF No. 176 (indicating that he knows of no one who eats the limu that was tested). Even if Wai did tell Lleces that Wai would eat the limu, the Army fails to establish that more than one resident of the Waianae Coast ate that limu, as required by the 2007 Settlement Agreement's use of the plural "area residents" to describe who needed to eat the marine resource for purposes of triggering the Army's duty to test.

21. Vince Kanae Dodge testified that, in the thirty-one years he had lived on the Waianae Coast, he had never eaten the three types of limu that were collected and tested. He further testified that had not seen or heard of anyone else

eating those three types of limu. See Decl. of Vince Kanae Dodge ¶ 25, ECF No. 176.

22. Dodge testified that he ate octopus, and that octopus was one of the common marine resources eaten by local residents. See Dodge Decl. ¶¶ 32-33, ECF No. 176; Dodge Test. at 1-68, ECF No. 194, June 21, 2011 (indicating that "folks" catch octopus); Shirakata Decl. ¶ 11, ECF No. 175 (indicating that he spoke with a free diver who was trying to catch octopus at Mākua Beach). Wai similarly testified that octopus was frequently caught at Mākua Beach. See Wai Decl. ¶ 20, ECF No. 177. William Aila also indicated that he ate octopus from Mākua Beach. See Depo. Designation at 17, ECF No. 171-1.

23. Uyen Tran, a supervisory chemist for the Army Corp of Engineers, testified that area residents of the Waianae Coast had told the Army that sea cucumber was gathered at Mākua Beach and eaten. Tran Test. at 1-103 and 1-104, ECF No. 194, June 21, 2011. Susan Carstenn similarly testified that the Army understood that sea cucumber was gathered and eaten by area residents. Carstenn Test. at 1-124, ECF No. 194, June 21, 2011 ("Q So the Army/Tetra Tech team made a determination that the black sea cucumber's a marine resource on which area residents rely for subsistence; correct? A Yes."); see also Aila Depo. Designation at 62-63 (indicating that Aila knew someone who

enjoyed eating sea cucumber and that Aila was aware of other families who gathered sea cucumber).

24. Although octopus and sea cucumber qualified as "other marine resources" eaten by area residents, neither was caught and tested because the Army did not authorize Tetra Tech to dive to collect samples. See Lleces Decl. ¶ 17; Tran Decl. ¶ 29, ECF No. 178; see also Aila Depo. Designations at 56 (indicating that it is not possible to harvest octopus from shore).

25. The Army concedes that, although it agreed to conduct studies to determine whether fish, limu, shellfish, and other marine resources were contaminated, it did not test anything falling in the category "other marine resources." Instead, the Army assumed that, because the species of fish, limu, and shellfish that it did test were contaminated, "other marine resources" must also have been contaminated. See Marine Resource Survey at 6-7, Ex. 20 ("Fish, shellfish, limu [and the report assumes that other marine resources] near Mākua Beach and in the muliwai, on which area residents rely for subsistence, are contaminated by substances that are known to be associated with the proposed training at Mākua." (brackets in original)) and ("Although marine resources other than fish, shellfish, and limu were not tested, the sampling was representative of other marine resources within the Mākua area."); see also Army's Oral

Opposition to Motion for Judgment as a Matter of Law at 1-189, June 21, 2011, ECF No. 194 (indicating that the Army could not identify anything gathered and tested that qualified as an "other marine resource") and at 1-191 to 1-193 (indicating that the Army did not give the words "relied on for subsistence" a reading expansive enough to include anything not itself eaten by residents but essential to what was indeed eaten, such as, for instance, sediment on the ocean floor essential to the lives of fish, shellfish, or limu that area residents ate); see also Decl. of J.E. Jack Rensel, Ph.D., June 21, 2011, ECF No. 180 ("The Marine Resources Study also failed to sample any non-fish, non-shellfish marine animals consumed by area residents, such as octopus and black sea cucumbers").

26. In 2008, additional samples of shellfish and invertebrates were collected for testing. See Plaintiff's Ex. 20 at 3-6; Lleces Decl. ¶ 19 (indicating that, in 2008, the Army sampled additional shellfish, including the helmut urchin and kona crab); see also Ex. 112 (October 17, 2008, letter describing shellfish field sampling).

27. In April 2009, the Army completed its Marine Resources Study Field Sampling Results and Risk Assessment. See Ex. 20.

28. Table 2-2 of the marine resources study summarizes what the Army tested and where the samples came from.

See id., Table 2-2. The study indicates that multiple samples of a species sometimes had to be combined to ensure that a sample was large enough to be tested. See id. at 3-1.

29. Section 4 of the study discusses the human health risk, evaluating whether the effect of past training activities at MMR suggested that proposed training activities at MMR would pose a human health risk to area residents relying on marine resources for subsistence. Based on assumptions concerning the amount and frequency of fish, limu, and shellfish consumed by an individual of a certain size, and taking into account comparisons between contamination detected in the samples collected and contamination in background samples, the study examines the potential "carcinogenic risk" to area residents. It indicates the following:

Risk	Marine Resource	Location	Who	Study Discussion
incremental increase of 3.5×10^{-5}	fish	Māuka Muliwai	subsistence fishermen	pages 4-22 4-45
incremental increase of 1×10^{-5} or 9×10^{-6}	fish	Māuka Muliwai	recreational fishermen	compare page 4-24 with 4-45
incremental increase of 3×10^{-5}	fish	nearshore Mākua Beach	subsistence fishermen	pages 4-27 4-46
incremental increase of 1×10^{-5} or 9×10^{-6}	fish	nearshore Mākua Beach	recreational fishermen	compare page 4-33 with 4-46

increase of 1×10^{-2}	limu	nearshore Mākua Beach	subsistence fishermen	pages 4-33 and 4-46
increase of 3×10^{-3}	limu	nearshore Mākua Beach	recreational fishermen	page 4-35 and 4-46
incremental increase of 4×10^{-6}	shellfish	Māuka Muliwai	subsistence fishermen	page 4-36 and 4-46
incremental increase of 1×10^{-6}	shellfish	Māuka Muliwai	recreational fishermen	page 4-38 and 4-46
no incremental cancer risk	shellfish	nearshore Mākua Beach	subsistence fishermen	page 4-38 and 4-47
no incremental cancer risk	shellfish	nearshore Mākua Beach	recreational fishermen	page 4-41 and 4-47

30. The report concludes that, because the health risks posed by marine resources from the Mākua area are relatively similar to the risks posed by marine resources from background sites, the Army's past training activities are not entirely responsible for the incremental increase in health risk.

The study then concludes:

Considering the level of substances found within the Mākua area, the numerous sources with which these substances are associated, and the ability of these substances from multiple sources to be transported by rain flow and ocean currents, it is not likely that future activities at MMR alone would contribute substances to the marine environment at a level sufficient to cause a human health risk. Even though it is not likely that future activities at MMR alone would cause this risk to human health, they could add to existing contamination in marine resources.

Id. at 6-9.

III. CONCLUSIONS OF LAW.

1. In reviewing actions for compliance with settlement agreements, this court applies normal principles of contract law. This court need not decide whether to apply Hawaii or federal common law rules of contract construction, as they are the same in this case. See O'Niel v. Bunge Corp., 365 F.3d 820, 822 (9th Cir. 2004) ("construction and enforcement of settlement agreements are governed by principles of local law which apply to interpretation of contracts generally"); Funeral Fin. Sys. v. United States, 234 F.3d 1015, 1018 (7th Cir. 2000) ("Interpreting the meaning of a provision in a federal government contract is a matter of federal common law, and therefore, we must apply federal common law rules of contract interpretation"); Boskoff v. Yano, 217 F. Supp. 2d 1077, 1085 (D. Haw. 2001) (applying Hawaii contract law to construe a settlement agreement).

2. Under Hawaii law, contract terms are "interpreted according to their plain, ordinary and accepted use in common speech, unless the contract indicates a different meaning." Amfac, Inc. v. Waikiki Beachcomber Inv. Co., 74 Haw. 85, 108, 839 P.2d 10, 24 (1992). Similarly, federal common law follows general principals of contract construction. See Ellinger v. United States, 470 F.3d 1325, 1336 (11th Cir. 2006). Under federal common law, courts interpret contractual language "in an

ordinary and popular sense as would a person of average intelligence and experience." Funeral Fin. Sys., 234 F.3d at 1018.

3. Paragraph 6 of the 2007 Settlement Agreement required the Army to complete

studies to determine whether fish, limu, shellfish, and other marine resources near Mākua Beach and in the muliwai on which area residents rely for subsistence are contaminated by substances associated with the proposed training activities at MMR . . . [and to evaluate] the potential that activities at MMR have contributed or will contribute to any such contamination and whether the proposed training activities at MMR pose a human health risk to area residents [who] rely on marine resources for subsistence.

Ex. 15 ¶ 6.

4. This court previously ruled that the 2007 Settlement Agreement required the Army to conduct meaningful tests of the marine resources, but the agreement did not require optimal tests. See Order Granting in Part and Denying in Part Cross-Motions for Summary Judgment at 18, ECF No. 96, Oct. 27, 2010.

5. At a minimum, the plain language and grammatical reading of Paragraph 6 of the 2007 Settlement Agreement requires the Army to conduct one or more studies of four categories of marine resources found near Mākua Beach and in the muliwai on which area residents rely for subsistence, which the parties

agree means resources that area residents eat. This means that the Army needed to test 1) fish, 2) limu, 3) shellfish, and 4) other marine resources. See Cal. v. Altus Fin. S.A., 540 F.3d 992, 1008 (9th Cir. 2008) ("Ordinarily, when the word 'and' appears in a list of requirements, it is conjunctive and indicates that all requirements must be satisfied."); CJS Contracts § 411 (West 2011) ("In its ordinary sense, the word 'and,' as used in a contract, is strictly of a conjunctive nature").

6. There is no question that the Army collected and tested fish, limu, and shellfish. There is also no dispute that the Army did not test any "other marine resource" eaten by area residents. Instead, the Army assumed that "other marine resources" were contaminated. This assumption meant that the Army failed to actually test "other marine resources" eaten by area residents, even though the Army was aware that area residents gathered and ate octopus and sea cucumber (marine resources that are not fish, limu, or shellfish) from Mākua Beach. Had the Army tested these marine resources, the Army would at least have satisfied the obligation to test "other marine resources" that area residents eat from Mākua Beach. By failing to test any "other marine resource" eaten by area residents simply because those resources required the gatherers to dive, something Tetra Tech was not authorized to do, the Army

violated the agreement. That is, the Army failed to satisfy its obligation to provide a meaningful study concerning the contamination of "other marine resources" when it simply assumed that "other marine resources" were contaminated. Had the Army established that contamination is consistent across species, its assumption might have been justified. However, the Army did not make that argument, and the evidence in the record suggests the contrary. See Foran Decl. ¶ 20, June 21, 2011, ECF No. 181 ("Not all species of animals and plants take up the same contaminants, however, and, even when they do, they can take up each contaminant at different rates.").

7. The court is not persuaded by the Army's argument that, even if they were required to test "other marine resources," any such breach was not material. The use of the conjunctive "and" in the settlement agreement required the Army to test four categories of things, including "other marine resources," if eaten by area residents. The agreement did not require a specific number of species in each category to be tested, but when no species in a category is tested, that is a clear breach. To conclude otherwise would make a nullity of a category. The Army's argument, taken to its logical conclusion, would have allowed the Army to test one fish and then to assume from the result that tests of limu, shellfish, and "other marine

resources" would have yielded the same result. Thus, the Army's argument could make a nullity of three categories!

8. The 2007 Settlement Agreement also required the Army to "evaluate the potential" that its activities at MMR have contributed or will contribute to contamination of the marine resources and to evaluate "whether the proposed training activities at MMR pose a human health risk to area residents that rely on marine resources for subsistence." In simply assuming that "other marine resources" were contaminated, the Army failed to satisfy its contractual obligation to "evaluate" whether that contamination posed a human health risk to area residents. The Army appears to be saying that, if it had tested only sediment and then assumed that all marine resources were contaminated because the sediment was contaminated, that would have qualified as an evaluation. Area residents would then have not had a human health risk assessment based on actual contamination data. Indeed, the Army's assumption concerning "other marine resources" entirely deprived area residents of even underlying data. It does not matter that the Army's study concluded that it was unlikely that its activities alone would contribute to any human health risk. Because area residents were deprived of actual data, the study could not be meaningful with respect to "other marine resources."

9. The Army also violated the 2007 Settlement Agreement's requirement that limu eaten by area residents be tested. The Army does not dispute that it failed to test limu eaten by area residents. The Army gathered and tested three types of limu that its own study notes are not eaten by area residents, then assumed for purposes of the study that limu eaten by area residents would be similarly contaminated. This assumption is not a substitute for a meaningful study concerning limu eaten by area residents. If the 2007 Settlement Agreement has any meaning, it must, as noted in this court's earlier summary judgment order, require a meaningful study. The Army's conclusion regarding the human health risks presented by limu actually eaten by area residents lacks any meaning, given its total reliance on an assumption that is unsupported by evidence before the court.

10. Mālama Mākua contends that the Army additionally violated the 2007 Settlement Agreement by testing only the Picasso triggerfish, Blackspot sergeant, Manybar goatfish, and Christmas wrasse from the nearshore Mākua Beach waters. Mālama Mākua argues that area residents do not eat three of these fish. For example, Wai and Dodge testified that they know of no area residents who eat the Picasso triggerfish, Blackspot sergeant, or Christmas wrasse. Wai Decl. ¶ 21; Dodge Decl. ¶¶ 35-36. Wai says that she has never eaten those fish and has never heard of

anyone who has eaten the Picasso triggerfish. Wai Decl. ¶ 22.

Wai testified that she has only seen one person eat the Christmas wrasse. Id. Dodge testified that, in his experience, area residents are not opportunistic fishermen, but instead target fish (and other marine resources) through their method of fishing (pole fishing versus spear fishing) and type of bait (limu versus squid, shrimp, etc.). Dodge Test. ¶ 42.

11. Mālama Mākua fails to prove by a preponderance of the evidence that the Army failed to test fish eaten by area residents. It may well be that Wai and Dodge do not eat those fish, but they do not and cannot speak for all area residents. On the other hand, Lleces testified that she was told by Leandra Wai and two local fishermen that any fish that were caught were eaten by area residents. See Lleces Decl. ¶¶ 20-21. The Army relied on statements made to them in determining whether the fish they collected for their survey were actually consumed by area residents. In this trial, the court, over Mālama Mākua's hearsay objections, admitted those statements for the purpose of establishing the basis of the Army's belief that the fish were eaten, not for the purpose of proving the truth of the statements. Nevertheless, to establish a breach of the 2007 Settlement Agreement with respect to the fish that were tested, Mālama Mākua must show more than a mere dispute about whether every fish species tested was eaten by area residents. Even if

only a few area residents eat those fish species, the Army at least arguably could include those species in its study. There is no dispute that area residents eat goatfish and that Wai herself testified that she saw someone eat a Christmas wrasse once. As no frequency of consumption is called for in the agreement, Mālama Mākua does not meet its burden of showing that the Army's fish sampling breached the agreement.

12. Nor is the court persuaded by Mālama Mākua's argument that, given the Army's failure to consult all area residents, statistically supported data and analysis were necessary to determine the pattern of consuming resources from Mākua Beach. This court previously ruled that the 2007 Settlement Agreement did not require any particular survey protocol. The agreement merely required a meaningful survey. See ECF No. 96. at 16. Accordingly, even if Mālama Mākua and its experts believe that the survey was scientifically invalid because it was not supported by appropriate statistical data, the agreement did not require any specific quantity of data. The court has no basis of concluding that the Army's questioning of self-identified residents of the Waianae Coast was insufficient to satisfy its obligation to identify what was consumed by area residents. While the Army's methodology might have been better, this court cannot say that, as applied to fish and shellfish, it lacked meaning and therefore breached the agreement.

13. With respect to Mālama Mākua's complaint that the study's evaluation was deficient because it lacked sufficient statistical data to support its assumptions, this court notes that an area resident has the ability to know how much and how often he or she consumes a particular fish or shellfish species. An area resident also knows whether he or she is bigger or smaller than the hypothetical consumer described in the study. This information in the resident's own control allows the resident to apply the study's conclusions to his or her own situation. Quite apart from the meaning an individual resident might be able to draw from the study with respect to the human health risk of consuming fish or shellfish, Mālama Mākua, as the entity claiming a breach of the 2007 Settlement Agreement, points to nothing in the agreement requiring any specific level of statistical data. This court falls back on the more general requirement that any study be at least meaningful.

14. Accordingly, except with respect to the Army's failure to test limu and "other marine resources" eaten by area residents, the study was a meaningful evaluation that satisfied the Army's obligations.

IV. CONCLUSION.

The Army breached the 2007 Settlement Agreement by failing to test anything qualifying as an "other marine resource" and by failing to test limu eaten by area residents. In all

other respects, Mālama Mākua does not show that the Army breached the agreement.

IT IS SO ORDERED.

DATED: Honolulu, Hawaii, September 30, 2011.



/s/ Susan Oki Mollway
Susan Oki Mollway
Chief United States District Judge

Mālama Mākua v. Gates, et al.; Civil No. 09-00369 SOM/LEK; FINDINGS OF FACT;
CONCLUSIONS OF LAW; ORDER DETERMINING THAT THE ARMY BREACHED THE 2007 SETTLEMENT
AGREEMENT IN TWO WAYS, BUT NOT IN OTHER WAYS